L Number	Hits	Search Text	DB	Time stamp
1	3109	polymer near membrane	USPAT	2003/10/20 11:12
2	1028	BATTERY NEAR SEPARATOR	USPAT	2003/10/20 11:12
3	531	429/247,249.CCLS.	USPAT	2003/10/20 11:12
4	8937	(POSITIVE POSITIVELY) NEAR (ION IONS	USPAT	2003/10/20
5	3109	IONIC) POLYMER NEAR MEMBRANE	USPAT	11:13 2003/10/20
6	346035	POLYETHYLENE POLYPROPYLENE	USPAT	11:13 2003/10/20
7	44	POLOLEFIN	USPAT	11:14 2003/10/20
8	474	522/150,157,161,162.CCLS.	USPAT	11:14 2003/10/20
10	128	522/2.CCLS.	USPAT	11:14
11	3	522/2.ccls. AND ((POSITIVE POSITIVELY)	USPAT	11:35 2003/10/20
13	21	NEAR (ION IONS IONIC)) (429/247,249.CCLS. AND ((POSITIVE	USPAT	11:17 2003/10/20
1.0		POSITIVELY) NEAR (ION IONS IONIC))) AND (POLYETHYLENE POLYPROPYLENE)		11:17
12	24	429/247,249.CCLS. AND ((POSITIVE POSITIVELY) NEAR (ION IONS IONIC))	USPAT	2003/10/20
14	156	429/247,249.CCLS. AND (BATTERY NEAR SEPARATOR)	USPAT	2003/10/20 11:22
15	116	(429/247,249.CCLS. AND (BATTERY NEAR SEPARATOR)) AND (POLYETHYLENE	USPAT	2003/10/20 11:22
16	72	POLYPROPYLENE) ((429/247,249.CCLS. AND (BATTERY NEAR	USPAT	2003/10/20
		SEPARATOR)) AND (POLYETHYLENE POLYPROPYLENE)) AND (ION IONS)		11:23
18	17235	(ION IONS) SAME (IRRADIATE IRRADIATION RADIATION)	USPAT	2003/10/20 11:23
19	1427	(ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)	USPAT	2003/10/20 11:23
20	0	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)) AND ((429/247,249.CCLS. AND	USPAT	2003/10/20
		(BATTERY NEAR SEPARATOR)) AND (POLYETHYLENE POLYPROPYLENE))		
21	5	((ION IONS) SAME (IRRADIATE IRRADIATION RADIATION)) AND ((429/247,249.CCLS. AND	USPAT	2003/10/20 11:29
		(BATTERY NEAR SEPARATOR)) AND (POLYETHYLENE POLYPROPYLENE))		
22	3	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)) AND (polymer near membrane)	USPAT	2003/10/20
23	1	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION) AND (BATTERY NEAR SEPARATOR)	USPAT	2003/10/20 11:31
24	0	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)) AND 429/247,249.CCLS.	USPAT	2003/10/20
25	126	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION) AND ((POSITIVE POSITIVELY)	USPAT	2003/10/20 11:31
26	426	NEAR (ION IONS IONIC)) ((ION IONS) NEAR (IRRADIATE IRRADIATION	USPAT	2003/10/20
27	3	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)) AND "54" ((ION IONS) NEAR (IRRADIATE IRRADIATION	USPAT	11:31 2003/10/20
28	176	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)) AND (POLYMER NEAR MEMBRANE) ((ION IONS) NEAR (IRRADIATE IRRADIATION	USPAT	11:31 2003/10/20
	170	((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)) AND (POLYETHYLENE POLYPROPYLENE)	ODEMI	11:31
29	0	(((ION IONS) NEAR (IRRADIATE IRRADIATION	USPAT	2003/10/20
20	a 1	RADIATION) AND (POLYETHYLENE POLYPROPYLENE) AND ((522/002).CCLs.)	псруш	11:32
30	1	(((ION IONS) NEAR (IRRADIATE IRRADIATION RADIATION)) AND (POLYETHYLENE	USPAT	2003/10/20 11:32
L		POLYPROPYLENE)) AND 522/2.CCLS.		

31	5		USPAT	2003/10/20
1		RADIATION)) AND (POLYETHYLENE		11:32
		POLYPROPYLENE)) AND 522/150,157,161,162.CCLS.		
32	5		USPAT	2003/10/20
		RADIATION)) AND (POLYETHYLENE		11:32
		POLYPROPYLENE)) AND		
		522/150,157,161,162.CCLS.) NOT (((ION		
		IONS) SAME (IRRADIATE IRRADIATION		
		RADIATION)) AND ((429/247,249.CCLS. AND (BATTERY NEAR SEPARATOR)) AND		
	İ	(POLYETHYLENE POLYPROPYLENE)))		
33	7	(((USPAT	2003/10/20
		RADIATION)) AND (POLYETHYLENE		11:35
		POLYPROPYLENE)) AND ((POSITIVE POSITIVELY) NEAR (ION IONS IONIC))		
	892		USPAT	2002/02/08
İ		added, mear department	ODIAI	12:30
_	315016	polyolefin or polyethylene or	USPAT	2002/02/08
		polypropylene		12:31
-	31566		USPAT	2002/02/08
1_	6852	treating surface near hydrophilic or surface near	USPAT	12:32 2002/02/08
	0002	hydrophobic	USFAI	12:32
-	7225		USPAT;	2002/02/08
1	1	hydrophobic	US-PGPUB	12:32
_	1408	(surface near treatment or surface near	USPAT;	2002/02/08
1		treating) and (surface near hydrophilic or surface near hydrophobic)	US-PGPUB	12:33
_	897		USPAT;	2002/02/08
		treating) and (surface near hydrophilic	US-PGPUB	12:33
		or surface near hydrophobic)) and		
		(polyolefin or polyethylene or		
_	1453	polypropylene) (polymer near membrane) and (polyolefin	USPAT;	2002/02/00
	1405	or polyethylene or polypropylene)	US-PGPUB	2002/02/08
_	15	(((surface near treatment or surface near	USPAT;	2002/02/08
		treating) and (surface near hydrophilic	US-PGPUB	12:57
		or surface near hydrophobic)) and		
		(polyolefin or polyethylene or polypropylene)) and (polymer near		
		membrane)		
_	8	(("3231530") or ("3853601") or	USPAT	2002/02/08
		("3951815") or ("4039440") or ("4340482")		13:08
		or ("4346142") or ("5085775") or		
	505015	("5294346")).PN.	HCDAG	2002/02/08
	303013	Tou barereres	USPAT	13:12
_	13776	electron same irradiat\$4	USPAT	2002/02/08
		·		13:09
_	23336	electron same radiat\$4	USPAT	2002/02/08
_	30889	(electron same irradiat\$4) or (electron	USPAT	13:09 2002/02/08
	30009	same radiat\$4)	USPAI	13:09
_	31566	(ion particles) same radiation irradiate	USPAT	2002/02/08
	_			13:10
-	284938	radiation irradiate irradiation radiating	USPAT	2002/02/08
<u>_</u>	26566	irradiating (radiation irradiation	USPAT	13:11 2002/02/08
	20306	radiating irradiating) same (ion	OBERI	13:11
		particles)	•	
_	27991	(radiation irradiate irradiation	USPAT	2002/02/08
	47400	radiating irradiating) same electron	*****	13:12
_	47402	((radiation irradiate irradiation radiating irradiating) same (ion	USPAT	2002/02/08
i		particles)) or ((radiation irradiate		13.12
		irradiation radiating irradiating) same		
		electron)		
-	4507	ion adj bombardment	USPAT	2002/02/08
_	124	ionic adj particles	USPAT	13:12 2002/02/08
		Tours and barerers	OSPAI	13:12
	<u></u>			1

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~	289	ion adj particles	USPAT	2002/02/08
-	26	irradiate irradiation radiating	USPAT	2002/02/08 13:13
_	7	irradiating) (ionic adj particles) same (radiation irradiate irradiation radiating	USPAT	2002/02/08
_	33		USPAT	2002/02/08
		irradiate irradiation radiating irradiating) or ((ionic adj particles) same (radiation irradiate irradiation radiating irradiating))		13:13
~	O	(((ion adj particles) same (radiation irradiate irradiation radiating irradiating)) or ((ionic adj particles) same (radiation irradiate irradiation radiating irradiating))) and (polymer	USPAT	2002/02/08
	0	near membrane) (((ion adj particles) same (radiation irradiate irradiation radiating irradiating)) or ((ionic adj particles) same (radiation irradiate irradiation radiating irradiating))) and (battery	USPAT	2002/02/08 13:13
_	10	near separator) (((ion adj particles) same (radiation irradiate irradiation radiating irradiating)) or ((ionic adj particles) same (radiation irradiate irradiation	USPAT	2002/02/08 13:17
	320	radiating irradiating))) and (polyolefin or polyethylene or polypropylene)		0000 (00 (00
	423	522/157,158,159,161.ccls. 522/109,110,11,112.ccls.	USPAT	2002/02/08
_	0	522/157,158,159,161.ccls. and (ion adj	USPAT USPAT	2002/02/08 13:18 2002/02/08
_	0	bombardment) 522/157,158,159,161.ccls. and (ionic adj	USPAT	13:18 2002/02/08
-	1	particles) 522/157,158,159,161.ccls. and (ion adj	USPAT	13:18 2002/02/08
-	132	<pre>particles) 522/157,158,159,161.ccls. and ((electron same irradiat\$4) or (electron same radiat\$4))</pre>	USPAT	13:19 2002/02/08 13:19
-	3	(522/157,158,159,161.ccls. and ((electron same irradiat\$4) or (electron same radiat\$4)) and (polymer near membrane)	USPAT	2002/02/08 13:21
_	163	522/109,110,11,112.ccls. and ((electron same irradiat\$4) or (electron same	USPAT	2002/02/08 13:21
_	0	radiat\$4)) (522/109,110,11,112.ccls. and ((electron same irradiat\$4) or (electron same	USPAT	2002/02/08
-	3	radiat\$4))) and (polymer near membrane) (522/109,110,11,112.ccls. and ((electron same irradiat\$4) or (electron same	USPAT	2002/02/08
_	3	<pre>radiat\$4))) and (battery near separator) ((522/109,110,11,112.ccls. and ((electron same irradiat\$4) or (electron same</pre>	USPAT	2002/02/08
		radiat\$4))) and (battery near separator)) not ((522/157,158,159,161.ccls. and ((electron same irradiat\$4) or (electron same radiat\$4))) and (polymer near membrane))		13.23
-	55	(522/109,110,11,112.ccls. and ((electron same irradiat\$4) or (electron same radiat\$4))) and vacuum	USPAT	2002/02/08 13:24
_	1	((522/109,110,11,112.ccls. and ((electron same irradiat\$4) or (electron same radiat\$4))) and vacuum) and ((surface near treatment or surface near treating)	USPAT	2002/02/08 13:25
		and (surface near hydrophilic or surface near hydrophobic))		

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	_			
-	0	////////	USPAT	2002/02/08
-	0	, (201120 00)	USPAT	13:25 2002/02/08
_	97	particles) 522/157,158,159,161.ccls. and vacuum	USPAT	13:25 2002/02/08
	1			13:26
	1	and ((surface near treatment or surface	USPAT	2002/02/08 13:26
		near treating) and (surface near hydrophic))		
_	77	(522/157,158,159,161.ccls. and vacuum)	USPAT	2002/02/08
		and (polyolefin or polyethylene or polypropylene)		13:26
~	1	((522/157,158,159,161.ccls. and vacuum)	USPAT	2002/02/08
		and (polyolefin or polyethylene or polypropylene)) and (polymer near		13:27
	63	membrane)	***************************************	2000 (00 (00
	63	and (polyolefin or polyethylene or	USPAT	2002/02/08
_	6	polypropylene)) and surface ((522/157,158,159,161.ccls. and vacuum)	USPAT	2002/02/08
		and (polyolefin or polyethylene or		13:36
_	21211	polypropylene)) and hydrophilic polymer and membrane	EPO; JPO;	2002/02/08
	17000		DERWENT	13:37
_	17899	battery and separator	EPO; JPO; DERWENT	2002/02/08
-	317557	polyolefin or polyethylene or polypropylene	EPO; JPO;	2002/02/08
-	217	"ion particles"	DERWENT EPO; JPO;	2002/02/08
-	39	"ionic particles"	DERWENT EPO; JPO;	13:37 2002/02/08
	241200	-	DERWENT	13:37
_	241299	electron	EPO; JPO; DERWENT	2002/02/08
-	377541	irradiation radiation irradiate	EPO; JPO; DERWENT	2002/02/08
_	2272	(polymer and membrane) and (polyolefin or	EPO; JPO;	2002/02/08
_	0	polyethylene or polypropylene) ((polymer and membrane) and (polyolefin	DERWENT USPAT	13:39 2002/02/08
		or polyethylene or polypropylene)) and "ion particles"		13:39
-	0	((polymer and membrane) and (polyolefin	USPAT	2002/02/08
		or polyethylene or polypropylene)) and electron		13:39
-	0	((polymer and membrane) and (polyolefin or polyethylene or polypropylene)) and	USPAT	2002/02/08
		(irradiation radiation irradiate)		
_	0	(battery and separator) and (polyolefin or polyethylene or polypropylene)	USPAT	2002/02/08
-	0	(battery and separator) and "ion particles"	USPAT	2002/02/08
_	0	(battery and separator) and "ionic	USPAT	13:39 2002/02/08
_	0	particles" (battery and separator) and electron	USPAT	13:39 2002/02/08
_	0	(battery and separator) and (irradiation	USPAT	13:39
		radiation irradiate)		2002/02/08
_	0	<pre>(polymer and membrane) and (irradiation radiation irradiate)</pre>	USPAT	2002/02/08
-	0	(polymer and membrane) and electron	USPAT	2002/02/08
_	0	(polymer and membrane) and "ionic particles"	USPAT	2002/02/08 13:40
_	0	(polymer and membrane) and "ion particles"	USPAT	2002/02/08
_	0	(polyolefin or polyethylene or	USPAT	13:40 2002/02/08
_	o	polypropylene) and "ion particles" (polyolefin or polyethylene or	USPAT	13:40 2002/02/08
		polypropylene) and "ionic particles"		13:40
	0	(polyolefin or polyethylene or polypropylene) and electron	USPAT	2002/02/08

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-	0	(polyolefin or polyethylene or	USPAT	2002/02/08
		polypropylene) and (irradiation radiation		13:40
		irradiate)		
_	l o	((polymer and membrane) and (polyolefin	USPAT	2002/02/08
	•	or polyethylene or polypropylene)) and		13:41
		(battery and separator)		
_	231700	surface and modification	USPAT	2002/02/08
-	231700	Sallace and modification	051111	13:42
	0250	surface and modification	EPO; JPO;	2002/02/08
-	9358	surface and modification	DERWENT	13:42
1				, ,
-	523	(surface and modification) and	EPO; JPO;	2002/02/08
		(polyolefin or polyethylene or	DERWENT	13:42
		polypropylene)		
-	56		EPO; JPO;	2002/02/08
		(polyolefin or polyethylene or	DERWENT	13:43
		polypropylene)) and (irradiation		
		radiation irradiate)		
-	28	((surface and modification) and	EPO; JPO;	2002/02/08
		(polyolefin or polyethylene or	DERWENT	13:43
		polypropylene)) and irradiating		
! _	64	(((surface and modification) and	EPO; JPO;	2002/02/08
	0.	(polyolefin or polyethylene or	DERWENT	13:43
		polypropylene)) and (irradiation		
		radiation irradiate)) (((surface and		
		modification) and (polyolefin or		
		polyethylene or polypropylene)) and		
		polyethylene or polypropylene); and		
	2.0	irradiating)		2002/02/08
-	16	((((surface and modification) and	EPO; JPO;	,
		(polyolefin or polyethylene or	DERWENT	13:47
		polypropylene)) and (irradiation		<u> </u>
		radiation irradiate)) (((surface and		
		modification) and (polyolefin or		
		polyethylene or polypropylene)) and		
		irradiating)) and electron		1
-	0	((((surface and modification) and	EPO; JPO;	2002/02/08
		(polyolefin or polyethylene or	DERWENT	13:47
		polypropylene)) and (irradiation		
		radiation irradiate)) (((surface and		
		modification) and (polyolefin or		1
		polyethylene or polypropylene)) and		1
		irradiating)) and "ionic particles"		
_	1	((((surface and modification) and	EPO; JPO;	2002/02/08
	_	(polyolefin or polyethylene or	DERWENT	13:47
		polypropylene)) and (irradiation	THE STATE OF THE S	10.17
		radiation irradiate)) (((surface and		
]		modification) and (polyolefin or		
		polyethylene or polypropylene)) and]
L i		irradiating)) and "ion particles"	L]